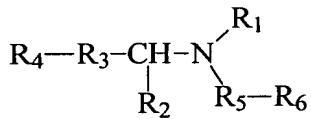


AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions of the claims and listing of the claims in the application:

1. **(Original)** A method for rescuing damaged nerve cells in a patient, comprising: administering to a patient having damaged nerve cells an amount of a deprenyl compound, wherein the deprenyl compound is represented by the structure of Formula I:



wherein

R₁ is hydrogen, alkyl, alkenyl, alkynyl, aralkyl, alkylcarbonyl, arylcarbonyl, alkoxy carbonyl, or aryloxy carbonyl;

R₂ is hydrogen or alkyl;

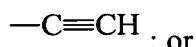
R₃ is a single bond, alkylene, or -(CH₂)_n-X-(CH₂)_m:

in which X is O, S, or N-methyl; m is 1 or 2; and n is 0, 1, or 2;

R₄ is alkyl, alkenyl, alkynyl, heterocyclyl, aryl or aralkyl; and

R₅ is alkylene, alkenylene, alkynylene and alkoxyethylene; and

R₆ is C₃-C₆ cycloalkyl or



R₂ and R₄-R₃ are joined to form, together with the methine to which they are attached, a cyclic or polycyclic group;

and pharmaceutically acceptable salts thereof;

such that rescuing of damaged nerve cells occurs in the patient;

with the proviso that the deprenyl compound is not selected from the group consisting of deprenyl, pargyline, AGN-1133, or AGN1135.

2. **(Cancelled)**

3. **(Currently Amended)** The method of claim 2 1, wherein R₁ is a group that can be removed *in vivo*.

4. **(Currently Amended)** The method of claim 2 1, wherein R₁ is hydrogen.

5. **(Currently Amended)** The method of claim 2 1, wherein R₁ is alkyl.

6. **(Original)** The method of claim 5, wherein R₁ is methyl.

7. **(Currently Amended)** The method of claim 21, wherein R₂ is methyl.

8. **(Currently Amended)** The method of claim 2 1, wherein R₃ is methylene.

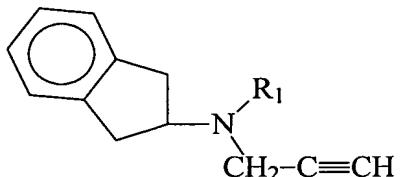
9. **(Currently Amended)** The method of claim 2 1, wherein R₄ is aryl.

10. **(Currently Amended)** The method of claim 21, wherein R₄ is phenyl.

11. **(Currently Amended)** The method of claim 2 1, wherein R₅ is methylene.

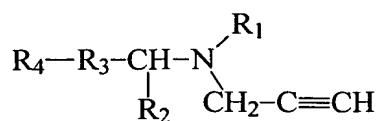
12. **(Currently Amended)** The method of claim 2 1, wherein R₆ is
 $\text{--C}\equiv\text{CH}$

13. **(Currently Amended)** The method of claim 2 1, wherein the deprenyl compound has the structure



wherein R₁ is hydrogen, alkyl, alkenyl, alkynyl, aralkyl, alkylcarbonyl, arylcarbonyl, alkoxy carbonyl, or aryloxycarbonyl.

14. **(Currently Amended)** The method of claim 2 1, wherein the deprenyl compound is represented by the structure:

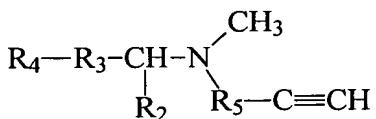


in which

R₁ is hydrogen, alkyl, alkenyl, alkynyl, aralkyl, alkylcarbonyl, arylcarbonyl, alkoxy carbonyl, or aryloxycarbonyl;

R₂ is hydrogen or alkyl;
R₃ is a bond or methylene; and
R₄ is aryl or aralkyl; or
R₂ and R₄-R₃ are joined to form, together with the methine to which they are attached, a cyclic or polycyclic group;
and pharmaceutically acceptable salts thereof.

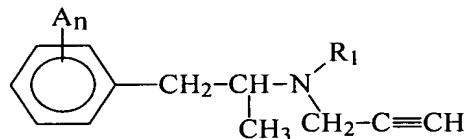
15. **(Currently Amended)** The method of claim 2 1, wherein the deprenyl compound is represented by the structure:



in which

R₂ is hydrogen or alkyl;
R₃ is a bond or methylene; and
R₄ is aryl or aralkyl; or
R₂ and R₄-R₃ are joined to form, together with the methine to which they are attached, a cyclic or polycyclic group; and
R₅ is alkylene, alkenylene, alkynylene and alkoxylene;
and pharmaceutically acceptable salts thereof.

16. **(Currently Amended)** The method of claim 2 1, wherein the deprenyl compound is represented by the structure:



in which

R₁ is hydrogen, alkyl, alkenyl, alkynyl, aralkyl, alkylcarbonyl, arylcarbonyl, alkoxycarbonyl, or aryloxycarbonyl;

A is a substituent independently selected for each occurrence from the group consisting of halogen, hydroxyl, alkyl, alkoxy, cyano, nitro, amino, carboxyl, -CF₃, or azido;

n is 0 or an integer from 1 to 5;
and pharmaceutically acceptable salts thereof.

17. **(Original)** The method of claim 1, wherein the deprenyl compound is (-)-desmethyldeprenyl.

18. **(Cancelled)**